Supplementary Digital Content

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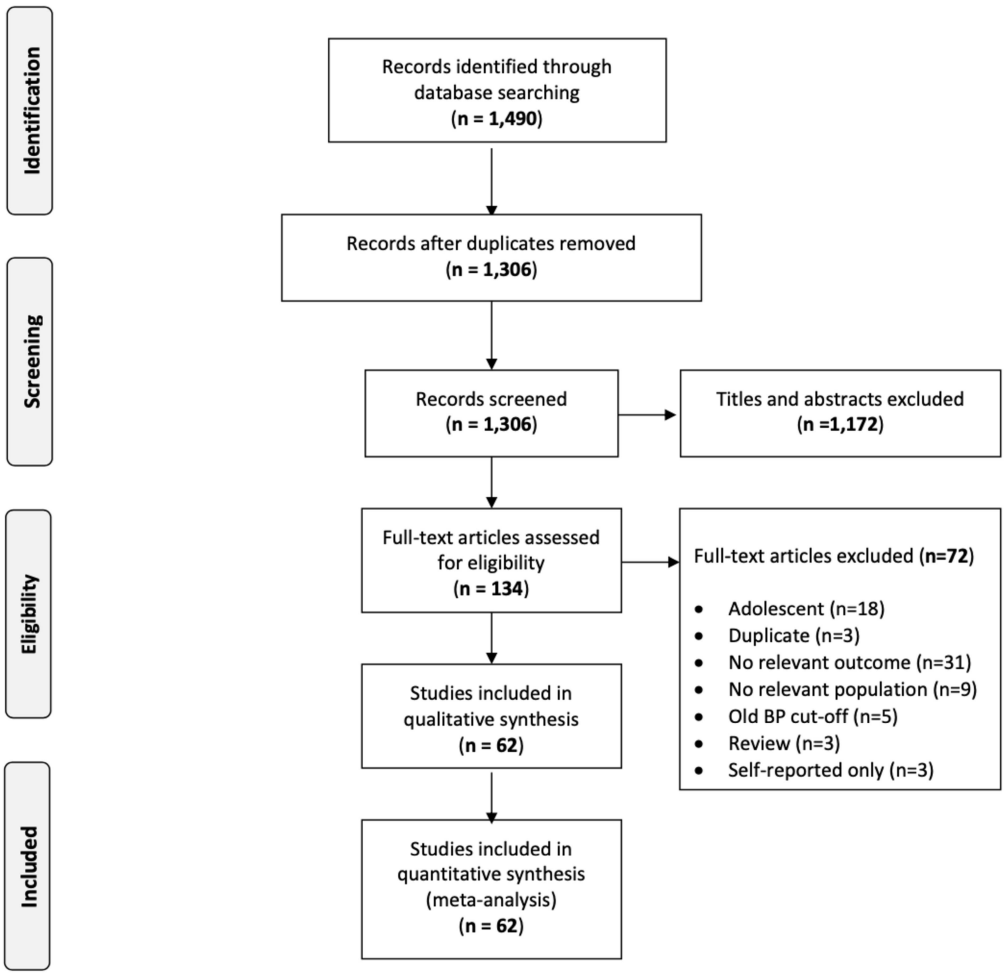
eFigure 1: Study selection and inclusion flow chart



Box 1: Study selection and inclusion flow chart

Domain	**Details**	**Risk of bias**
Selection of participants	Selection bias caused by the inadequate selection of participants	- Low - High - Unclear
Confounding variables	Selection bias caused by the inadequate confirmation and consideration of confounding variable	- Low - High - Unclear
Measurement of exposure	Performance bias caused by the inadequate measurement of exposure	- Low - High - Unclear
Blinding of outcome assessments	Detection bias caused by the inadequate blinding of outcome assessments	- Low - High - Unclear
Incomplete outcome data	Attrition bias caused by the inadequate handling of incomplete outcome data	- Low - High - Unclear
Selective outcome reporting	Reporting bias caused by the selective reporting of outcomes	- Low - High - Unclear

Uthman OA, *et al. BMJ Open* 2022; 12:e052393. doi: 10.1136/bmjopen-2021-052393

eTable 1: List of Excluded Studies

s/n	Study	Reason
1	Maiti 2016[1]	Adolescent
2	Khopkar 2015[2]	Adolescent
3	Paul 2013[3]	Adolescent
4	Kamath 2012[4]	Adolescent
5	Simsek 2012[5]	Adolescent
6	Saha 2011[6]	Adolescent
7	Oria 2010[7]	Adolescent
8	Saha 2008[8]	Adolescent
9	Saha 2008[9]	Adolescent
10	Sesso 2004[10]	Adolescent
11	Fernandes 2003[11]	Adolescent
12	Zeelie 2010[12]	Adolescent
13	Soudrassanane 2008[13]	Adolescent
14	Werner 2015[14]	Duplicate
15	van de Vijver 2016[15]	Duplicate
16	Haregu 2016[16]	Duplicate
17	Ezenwaka 1997[17]	Old BP cut-off
18	Suriyawongpaisal 1993[18]	Old BP cut-off
19	Suriyawongpaisal 1991[19]	Old BP cut-off
20	Sitthi-Amornn 1989[20]	Old BP cut-off
21	Bunnag 1990[21]	Old BP cut-off
22	E. Sharmin Trisha 2016[22]	No relevant outcome
23	Bhandari 2015[23]	No relevant outcome
24	Oti 2014[24]	No relevant outcome
25	Hiremath 2014[25]	No relevant outcome
26	Joshi 2013[26]	No relevant outcome
27	van de Vijver 2013[27]	No relevant outcome
28	Itrat 2011[28]	No relevant outcome
29	Ahmed 2011[29]	No relevant outcome
30	Haregu 2015[30]	No relevant outcome
31	van de Vijver 2015[31]	No relevant outcome
32	Kohli 2016[32]	No relevant outcome
33	Mudgapalli 2016[33]	No relevant population
34	Natarajan 2014[34]	No relevant population
35	Kumaramanickavel 2014[35]	No relevant population
36	Kumaramanickavel 2015[36]	No relevant population
37	Hulzebosch 2015[37]	No relevant population
38	Madhu 2016[38]	No relevant population
39	Mugure 2014[39]	No relevant population
40	Mukhopadhyay 2012[40]	No relevant population
41	Khan 2010[41]	No relevant population
42	Etyang 2013[42]	Review
43	Dhar 2014[43]	Review
44	Bhargava 1991[44]	Review
46	Kien 2015[45]	Self-reported only
47	Sur 2007[46]	Self-reported only
48	Thakur 2013[47]	Self-reported only
49	Ahmedani 2019[48]	No relevant outcome
50	Ashe 2019[49]	No relevant outcome
51	Asiki 2018[50]	No relevant outcome
52	Bagdey 2019[51]	No relevant outcome
53	Cope 2020[52]	No relevant outcome
54	De Silva 2018[53]	No relevant outcome
55	Kapwata 2018[54]	No relevant outcome
56	Kawazoe 2018 [55]	No relevant outcome

57	Khanam 2019[56]	No relevant outcome
58	Kolak 2018[57]	No relevant outcome
59	Korn 2018[58]	No relevant outcome
60	Kotian 2019[59]	No relevant outcome
61	Kumar 2018[60]	No relevant outcome
62	Ma 2018[61]	No relevant outcome
63	Maharana 2019[62]	No relevant outcome
64	Nagarkar 2018[63]	No relevant outcome
65	Narendran 2018[64]	No relevant outcome
66	Rajapakshe 2018[65]	No relevant outcome
67	Sarkar 2019[66]	No relevant outcome
68	Scazufca 2019[67]	No relevant outcome
69	Wang 2018[68]	No relevant outcome
70	Wekasah 2020[69]	No relevant outcome
71	Wilson 2020[70]	No relevant outcome
72	Yadav 2018[71]	No relevant outcome
73	Zhang 2019[72]	No relevant outcome

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eTable 2: Characteristics of included studies

Study	Country	Slum	Sample size	Age group	% female
Acharyya (2014)	India	North-Parganas	1052	25-64	49.8
Ahmad (2014)	India	Meerut	196	>60	50
Akinwale (2013)	Nigeria	Ijora Oloye, Ajegunle & Makoko	2434		
Anand (2007)	India	Faridabad	2562	15+	50.9
Ayah (2013)	Kenya		2061	18-90	49.1
Banerjee (2016)	India	Kolkata	10167	>20 years	60
Chakerborty (2012)	India	Kolkata	470	18-60	0
Chaturvedi (2007)	India	Delhi	596	>20	
Daniel (2013)	Nigeria	Ajegunle	964	20-81	65.8
Dasappa (2015)	India	Bangalore	2013	35+	50.8
Deepa (2011)	India	Ballabgarh, Delhi, Chennai, Trivandrum , Dibrugarh and Nagpur	15763	15-64	
Edwards (2015)	Kenya	Kibera			
Ezeala-Adikaibe (2016)	Nigeria	Enugu	774	⩾ 20	64.7
Ferreira (2005)	Brazil	Maceio	223	18-65	100
Florencio (2004)	Brazil	Maceio	416	18-60	57
Haregu (2016)	Kenya	Nairobi	5190	18+	46.2
Heitzinger (2014)	Peru	Lima	142	18-81	69.7
Huda (2012)	Bangladesh	Mirpur, Dhaka	1000	15-65	33.4
Jalil (2008)	Pakistan	Lahore	695		43.6
Joshi (2013)	India	Rourkela & Bhubaneswar	100	>18	69
Joshi (2014)	Kenya	Kibera	2045	18-90	49.1
Kar (2008)	India	Chandigarh & Haryana	1010	>30	58.9
Kar (2010)	India	Chandigarh & Haryana	150	>30	62
Khalequzzaman (2017)	Bangladesh	Dhakar	2551	18+	46.7
Kumari (2014)	India	Hyderabad	250		78
Lubree (2002)	India	Pune	150	30-50	100
Marins (2007)	Brazil	Rio-de-Janeiro	3279	>20	56.9
Misra (2001)	India	Gautam-Nagar, Delhi	532		68
Nirmala (2014)	India	Hyderabad, Telangana	700	>20	50.8
Olack (2015)	Kenya	Kibera	1528	35-64	58.1
Oli (2013)	Nepal	Kathmandu	689	15-64	58.9
Ongeti (2013)	Kenya	Kibera	400	14-75	70.3
Oti (2013)	Kenya	Viwandani & Korogocho		18+	46
Patil (2016)	India	Pune, Maharashtra	425	20+	
Rahim (2004)	Bangladesh	Dhakar	1555	20+	52.99
Rawal (2017)	Bangladesh	Dhaka	507		50
Sayeed (2007)	Bangladesh	Dhakar			59.2
Singh (b) (2012)	India	Delhi	474	60+	48
Singh (2012)	India	Patna	3118	>30	56.5
Sinha (2010)	India	Gokulpuri	275	18-40	100
Sithi-Amorn (1989)	Thailand	Klong-Toey	976		54.7

Snyder (2017)	Brazil		792		64.5
Sowemimo (2015)	Nigeria	Yemetu, Ibadan	806	18-90	
Sunita (2017)	India	Mumbai	6464	>40	
Unger (2015)	Brazil	Salvador	5649	>18	58.3
Uthakalla (2012)	India	Hyderabad		20-60	56
Vigneswari (2014)	India	Chennai	529	18+	77.3
Vigneswari (2015)	India		529	18+	77.3
Vikram (2003)	India	New-Delhi	639		73.4
Wasir (2007)	India	Delhi	278		
Yajnik (2008)	India		142	30-50	0
van de Vijver (2013)	Kenya	Viwandani & Korogocho	5190	>18	46.2
Bawah (2019)	Ghana	Accra	2009		
Chiang (2019)	Bangladesh	Dhaka	423		
Choudhury (2018)	Bangladesh	Dhaka	984	43.4	73
Dwivedi (2018)	India	Bangalore			
Gadallah (2018)	Egypt	West Delhi			
George (2019)	India	Bangalore		57.6	
Gonmei (2018)	India	Delhi			
Jain (2019)	India	Delhi	984	43.4	73
Tymejczyk (2019)	Haiti	Gurugram	420		
Vusirikala (2019)	Kenya	Nairobi		57.6	

eTable 3: Risk of bias of included studies

Study	Selection of participants	Confounding variables	Measurement of exposure	Blinding of outcome assessments	Incomplete outcome data	Selective outcome reporting
Acharyya (2014)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Ahmad (2014)	Low risk	High risk	Low risk	Low risk	Unclear risk	Low risk
Akinwale (2013)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Anand (2007)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Ayah (2013)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Banerjee (2016)	Low risk	Low risk	Low risk	Low risk	Unclear risk	Low risk
Chakerborty (2012)	High risk	High risk	Low risk	Low risk	Low risk	Low risk
Chaturvedi (2007)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Daniel (2013)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Dasappa (2015)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Deepa (2011)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Edwards (2015)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Ezeala-Adikaibe (2016)	High risk	Low risk	Low risk	Low risk	High risk	Low risk
Ferreira (2005)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Florencio (2004)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Haregu (2016)	Unclear risk	Low risk	Low risk	Low risk	Unclear risk	Low risk
Heitzinger (2014)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Huda (2012)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Jalil (2008)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Joshi (2013)	High risk	Low risk	Low risk	Low risk	Low risk	Low risk
Joshi (2014)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Kar (2008)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Kar (2010)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Khalequzzaman (2017)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Kumari (2014)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Lubree (2002)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Marins (2007)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Misra (2001)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Nirmala (2014)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Olack (2015)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Oli (2013)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Ongeti (2013)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Oti (2013)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Patil (2016)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Rahim (2004)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Rawal (2017)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Sayeed (2007)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Singh (b) (2012)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Singh (2012)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk

Study	Selection of participants	Confounding variables	Measurement of exposure	Blinding of outcome assessments	Incomplete outcome data	Selective outcome reporting
Sinha (2010)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Sithi-Amorn (1989)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Snyder (2017)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Sowemimo (2015)	Low risk	Low risk	Low risk	Low risk	Unclear risk	Low risk
Sunita (2017)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Unger (2015)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Uthakalla (2012)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Vigneswari (2014)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Vigneswari (2015)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
Vikram (2003)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Wasir (2007)	Low risk	High risk	Low risk	Low risk	High risk	Low risk
Yajnik (2008)	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
van de Vijver (2013)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Bawah (2019)	Unclear risk	Low risk	Low risk	Low risk	Unclear risk	Low risk
Chiang (2019)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Choudhury (2018)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Dwivedi (2018)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Gadallah (2018)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
George (2019)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Gonmei (2018)	Unclear risk	Unclear risk	Low risk	Low risk	Unclear risk	Low risk
Jain (2019)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Tymejczyk (2019)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk
Vusirikala (2019)	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk

Annex 1: MEDLINE Search Strategy

1 exp hypertension/ 2 hypertens$.mp. 3 exp blood pressure/ 4 (blood pressure or bloodpressure).mp. 5 (essential adj3 hypertension).ti,ab. 6 (isolat* adj3 hypertension).ti,ab. 7 (elevat* adj3 blood adj pressur*).ti,ab. 8 (high adj3 blood adj pressur*).ti,ab. 9 (increase* adj3 blood pressur*).ti,ab. 10 ((systolic or diastolic or arterial) adj3 pressur*).ti,ab. 11 essential hypertension.mp. 12 isolated hypertension.mp. 13 elevated blood pressure.mp. 14 high blood pressure.mp. 15 increase blood pressure.mp. 16 diastolic pressure.mp. 17 pre-hypertension.mp. 18 pre-hypertensive.mp. 19 prehypertension.mp. 20 prehypertensive.mp. 21 arterial pressure.mp. 22 cardiovascular diseases/ 23 exp coronary disease/ 24 cardiovascular risk factor$.tw. 25 (cardiovascular adj3 disease$).tw. 26 (Coronary adj3 disease$).tw. 27 heart disease$.tw. 28 coronary risk factor$.tw. 29 or/1-28
1 exp Diabetes Mellitus, Type 2/ 2 exp DIABETES MELLITUS/ 3 T2DM.ti,ab. 4 (Type* adj3 ("2" or "II" or two*) adj3 (diabete* or diabetic*)).tw. 5 ((Maturit* or adult* or slow*) adj3 onset* adj3 (diabete* or diabetic*)).tw. 6 ((Ketosis-resistant* or stable*) adj3 (diabete* or diabetic*)).tw. 7 ((Non-insulin* or Non insulin* or Noninsulin*) adj3 depend* adj3 (diabete* or diabetic*)).tw. 8 IDDM.ti,ab. 9 diabet$.ti. 10 PREDIABETIC STATE/ 11 prediabet$.ti,ab. 12 impaired glucose tolerance.ti,ab. 13 IGT.ti,ab. 14 Impaired fasting glucose.ti,ab. 15 IFG.ti,ab. 16 Impaired glucose regulation.ti,ab. 1 17 IGR.ti,ab. 18 GLUCOSE INTOLERANCE/ 19 (diabet* or glucose or hyperglycaemia or hyperglycaemia or postprandial or post-prandial or insulin or hypoglycemia or hypoglycaemia or IGT or OGTT or CGMS).tw. 20 (subclinical diabetes" or "subclinical diabetic" or "sub-clinical diabetes" or "sub-clinical diabetic").tw. 21 or/1-20
22 (baladi or bandas de miseria or barraca or barrio marginal or barrio or bidonville or brarek or bustee or chalis or chereka bete or dagatan or estero or favela or galoos or gecekondu or hrushebi).mp. 23 (ishash or karyan or katras or looban or loteamento or medina achouaia or morro or mudun safi or musseque or solares or tanake or taudis or township or tugurio or udukku or umjondolo or watta or zopadpattis).mp. 24 (slum or slums or ghetto or ghettos or informal settlement$ or shantytown$ or shanty town$).mp. 25 slum/ 26 ghetto/ 27 or/22-26